

Original Investigation

Effect of Topical Sucralfate vs Clindamycin on Posttonsillectomy Pain in Children Aged 6 to 12 Years

A Triple-Blind Randomized Clinical Trial

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IMPORTANCE Postoperative sore throat is one of the most common problems after tonsillectomy. Antibiotics remove the local flora and reduce inflammation and thus may reduce postoperative pain after tonsillectomy.

OBJECTIVE To assess the effect of topical sucralfate and clindamycin on local pain reduction after tonsillectomy in children aged 6 to 12 years.

DESIGN, SETTING, AND PARTICIPANTS Triple-blind randomized clinical trial of children aged 6 to 12 years with sleep apnea or snoring due to adenotonsillar hypertrophy and chronic airway obstruction or with chronic infections who were candidates for tonsillectomy at Besat Hospital, Hamadan University of Medical Sciences, from May to October 2013.

INTERVENTIONS Patients were randomly assigned to receive sucralfate mouthwash, clindamycin mouthwash, or placebo (cellulose). The oral cavity was washed before and immediately after surgery with 10 mL of the prepared solution for 1 minute and then suctioned. Then, 8 hours after surgery, the patients were asked to keep 10 mL of the prepared mouthwash solution in their mouths for 1 minute 3 times a day for 3 days.

MAIN OUTCOMES AND MEASURES Postoperative sore throat evaluated daily for 5 days using the Faces Pain Scale–Revised.

RESULTS Of 110 patients enrolled, 101 patients remained for analysis. Patients in the placebo group had significantly higher mean (SD) throat pain scores than did patients in both drug groups on postsurgery days 1 through 4. Day 1 scores were 8.00 (1.84) for placebo and 6.00 (1.84) for sucralfate and 6.79 (1.87) for clindamycin ($P = .001$). Pain scores were not significantly different on day 5. Acetaminophen use was more common in the placebo group on days 3 and 4 (2.97 and 2.44) vs the sucralfate group (2.24 and 2.15) and the clindamycin group (2.36 and 2.12) ($P = .001$ and $.02$, respectively). Bleeding on day 1 was more common in the placebo group (3 of 34) vs none in the drug groups. Food intolerance on day 1 was less common in patients receiving sucralfate (2 of 34) than placebo (9 of 34) or clindamycin (11 of 33) ($P = .02$). There was no significant difference among the 3 groups in numbers of episodes of nocturnal waking, halitosis, earache, nausea, and vomiting.

CONCLUSIONS AND RELEVANCE This trial indicated that topical sucralfate and clindamycin are safe drugs with no important adverse effects that can significantly reduce posttonsillectomy pain in children and help them return to normal life sooner.

TRIAL REGISTRATION Iranian Registry of Clinical Trials registration number: IRCT201303209014N16

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